

Ebnet Declaration Exhibit 1

Filed under Seal

UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

Mayo Foundation for Medical Education
and Research,

Plaintiff/Counterclaim
Defendant,

Case No. 21-cv-1039 (SRN/TNL)

v.

Knowledge to Practice, Inc.,

Defendant/Counterclaim
Plaintiff.

**This report has been marked
“Attorney’s Eyes Only” because it
references materials marked as such**

EXPERT REPORT OF MARK LANTERMAN

1. My name is Mark Lanterman.¹ I am the Chief Technology Officer of Computer Forensic Services (“CFS”) located in Minneapolis, Minnesota. CFS and I were retained by counsel for Defendant/Counterclaim Plaintiff, Knowledge to Practice, Inc. (“K2P”) to evaluate whether the Mayo Foundation for Medical Education and Research (“Mayo”) incorporated specific features and functionality of K2P’s platform into its own MedEd Manager platform.

2. Based on the materials provided to me, and consistent with the facts and opinions outlined in this report, there is evidence to indicate that Mayo looked to the programmed functionality of K2P’s platform to develop its own product, MedEd

¹ Neither my compensation nor CFS’s compensation is dependent upon the substance of my opinions or outcome of this case. Attached as **Exhibit A** is my CV, a list of cases in which I have testified in the last four years, as well as a list of articles I have published over the past 10 years.

Manager, with the assistance of its web development partner, Corporate Web Services (“CWS”).

I. Expert background

3. CFS specializes in the analysis of digital evidence in civil and criminal litigation. I have over 30 years of experience in computer forensics and cybersecurity. Prior to joining CFS, I was a sworn investigator for the United States Secret Service Electronic Crimes Task Force and acted as its senior computer forensic analyst.

4. I am certified by the United States Department of Homeland Security as a “Seized Computer Evidence Recovery Specialist,” as well as certified in computer forensics by the National White-Collar Crime Center. Both federal and state court judges have appointed me as a neutral computer forensic analyst or special master.

5. As part of my work with CFS, I am regularly asked to provide opinions about the functionality and operations of applications, including the analysis of source code (*e.g.*, computer instructions).

6. I graduated from Upsala College with both a Bachelor of Science and a Master’s degree in computer science. I completed my post graduate work in cyber security at Harvard University.

7. I am currently adjunct faculty of computer science for the University of Minnesota Technological Leadership Institute’s Master of Science and Security Technologies program (MSST). I am faculty at Hamline University and a professor of cybersecurity at the University of St. Thomas School of Law. I am also faculty for the

National Judicial College in Reno, Nevada and the Federal Judicial Center in Washington, D.C.

8. I have previously provided training or delivered keynote addresses for the United States Supreme Court; the Eleventh Circuit Federal Judicial Conference; the Eighth Circuit Federal Judicial Conference; the Southern District of Georgia; the Western District of Tennessee; and several state judicial conferences. I delivered the keynote address at the Chief Justices' Conference in Newport, Rhode Island and at Georgetown Law School's advanced e-discovery conference.

9. I was appointed by the Minnesota Supreme Court to serve as a member of Minnesota's Lawyers Professional Responsibility Board ("LPRB"). I currently serve on the LPRB's Rules and Opinion Committee.

10. I am a co-author of the Minnesota State Bar's e-Discovery Deskbook, and I also write monthly articles for *Minnesota Bench & Bar* magazine.

11. CFS is the exclusive, contracted computer forensic service provider for the Hennepin County Sheriff's Office and the Metropolitan Airports Commission, also known as the Minneapolis/Saint Paul International Airport. CFS is also partnered with the U.S. Secret Service to assist with its electronic investigations.

12. CFS holds a corporate private detective license issued by the Minnesota Board of Private Detective and Protective Agent Services (License No. 2341). I am CFS' Qualified Representative/Minnesota Manager for the license.

II. Materials Considered

13. A list of the materials I reviewed and considered in preparing this report is

attached as **Exhibit B**. Generally, these materials consist of information exchanged by the parties during litigation.

14. In addition to the discovery, on December 1, 2022, I was provided with credentials (usernames and passwords) to access three (3) online learning platforms for the purpose of evaluating the platforms from the perspective of a user. I was provided access to:

- a. The K2P portal;
- b. The Mayo CV course portal (the “Mayo platform”);
- c. The Mayo internal medicine course.

15. I reserve the right to supplement or amend this report should additional information be made available, or if additional details are requested.

16. While I was provided access to the portals generally describe above, I note that I was not provided with any source material for evaluation, such as the code, coded algorithms, or other “back-end” information that is not necessarily observable by simply accessing the portals as a user.

17. I was retained by Merchant & Gould to evaluate the discovery, as well as Mayo’s MedEd Manager and K2P’s platform, and provide an opinion about whether Mayo relied upon or otherwise derived functionality from K2P and incorporated such functionality in the MedEd Manager learning portal.

18. I am generally familiar with the factual allegations presented in this case.

19. I understand that K2P is a medical education company that provides online professional medical education and board review courses. (Knowledge to Practice’s Answer and Counterclaim (“Counterclaim”), p. 10, ¶ 14.) I understand that it delivers

these courses through the K2P Platform. (*Id.* at p. 13, ¶¶ 30-31.) The K2P Platform is accessed online by students who register for K2P courses.

20. I understand further that the K2P Platform user experience and user interface was created after extensive development efforts. (*Id.* at p. 10-13, ¶¶ 16-33.)

21. Mayo is part of the Mayo Clinic, and in addition to being a treating hospital, Mayo also provides education. Of relevance for the purposes of this report are Mayo's educational offerings in Cardiovascular medicine and Internal medicine.

22. Prior to partnering with K2P, these courses were live offerings, wherein learners would come to Mayo's Rochester campus for a multi-day live course during which they would sit in an auditorium and listen to lectures on relevant topics. (Nishimura Dep. at 14:18-16:1, 27:19-24.)

23. Mayo made several attempts at creating websites that could be called a platform, but those attempts were not successful. (*Id.* at 47:17-48:9.) Mayo was not able to build a portal or platform that was acceptable. (*Id.* at 195:7-196:7.) Instead, Mayo sold DVDs of some or all of these courses to learners who could not or did not want to attend a live course (*Id.* at 23:2-6), but prior to partnering with K2P, Mayo did not offer the courses as online board review courses. (*Id.* at 28:2-4, 48:12-14; McAdams Dep. Day 1, Oct. 26, 2022, at 49:12-14.)

24. In order to provide online course offerings, I understand that Mayo entered into contracts with K2P to offer a variety of online courses.

25. I understand that in 2018 Mayo did not renew the parties' contracts as to three courses referred to as the Cardiovascular Subspecialty Courses. (Declaration of

Mary Ellen Beliveau in Support of Defendant's Memorandum of Law in Support of Its Motion for a Preliminary Injunction ("Beliveau Declaration") ¶ 31.)

26. Instead, Mayo launched the new courses through Corporate Web Services ("CWS") updated MedEd Manager on or around January 31, 2020. (Counterclaim p. 17, ¶ 63.)

III. Communications contemporaneous with the development of MedEd Manager, demonstrate that Mayo sought to incorporate the functionality of K2P into MedEd Manager.

27. As noted above, I have received and reviewed various materials, including deposition testimony and email communications, that were produced by Mayo during the course of discovery. Generally, these emails remark upon K2P's features and functionality, and Mayo's desire to incorporate those functions into its own product.

28. These communications, for the purposes of this report, may be summarized as follows:

- a. On March 22, 2018, Teresa Atkinson of Mayo contacted its web development partner, CWS about a "future need to host [Mayo's] tests online" because "a few of [Mayo's] courses are not collaborating with K2P in 2019". (See MAYO_00065873, *see also* Ex. D-37.) In that same email, Mayo highlighted some of the functionality of the K2P platform, including "...a pre/post test, video/presentation hosting." (*Id.*)
- b. On May 1 of 2018, CWS asked for access to the K2P Platform or portal. (Ex. D-16.)

- c. On May 2 of 2018, Teresa Atkinson of Mayo was assigned a “to-do” to “provide CWS a way to review the K2P portal.” (Ex. D-17.)
- d. In or around May of 2018, credentials issued by K2P to Mayo to access the K2P platform were shared with CWS. In this way, CWS “impersonated” Mayo users by logging into the platform so that CWS could “[see] what [Mayo] liked and didn’t like”. (See McGinnis Dep. at 127:10-128:22, 138:14-21; *see also* MAYO_00070923, “Meeting To-Dos [...] Teresa - Provide CWS a way to review the K2P portal”; *see also* Atkinson Dep. at 25:14-27:14 confirming Ms. Atkinson gave CWS her log-in credentials to access the K2P Platform.)
- e. On May 29, 2018, Ms. Teresa Atkinson contacted Jonny Yucius and Shane Kovash of CWS that she registered for three K2P courses including “one with the full bells and whistles of the online product.” (See Ex. D-19.) Ms. Atkinson also mentioned that these courses will “give you a sense of where we’re at with K2P” and said “feel free to take a look.” (*Id.*) Attached to this May 29, 2018 email is a 14-point item list of “Portal Requirements” describing functionalities of the K2P Platform. Ms. Atkinson testified she was encouraging CWS to access the K2P Platform (*see* Atkinson Dep. at 31:22-32:14) and testified that she provided the product requirements to CWS so they could develop MedEd Manager using the K2P Platform as “a frame of reference” (*see* Atkinson Dep. at 28:10-30:11).

- f. On June 11, 2018, Teresa Atkinson of Mayo contacted Jonny Yucuis of CWS and provided a table of “mandatory requirements,” and indicated that they “relate to the current K2P portal experience.” (See Ex. D-21.) More specifically, the list of requirements included “pretest and post-test” functionality, its subfunctions, and others. (*Id.*)
- g. On January 25, 2019, Lynnea Chelstrom sent an email to Teresa Atkinson indicating that “I think we were just coping [sic] K2Ps ‘Agenda’ functionality, which is set up exactly like the Content Library...”. (See Ex. D-39.)
- h. On March 8, 2019, Chelstrom sends an email to CWS, attaching a screenshot of the K2P Platform, and inquiring about whether CWS could include functionality related to “recommended course materials” (*e.g.*, a feature that provides direction for follow up study, based upon the questions that users answer incorrectly. (See Ex. D-43.)
- i. On May 15, 2019, Jonny Yucuis of CWS emailed Mayo attaching a document entitled “Learning Gateway Phase II items for review”. (See Ex. D-25 at CWS_00000368). The document indicates, related to “Pre & Post-Assessment analytics report”, that “Possibly look at what K2P does.” (*Id.*)
- j. On August 7, 2019, Lynnea Babcock of Mayo sent, internally, notes about deconstructing and observing how K2P provides “recommended learning.” (See Ex. D-108.)

29. Based upon the materials described above, Mayo instructed CWS to create a platform that had, among other things:

- a. A content library with a learning track based upon assessments.
- b. Test assessments
- c. Specific content provided to learner based on knowledge gaps identified by tests (personalized learning)
- d. Maintenance of Certification credits
- e. Note taking capability
- f. Option for video or audio presentations.

(See Exhibits D-33, D-39, & D-46.)

30. Based upon the materials summarized above, it is my opinion that the K2P Platform was a directing force in the development of Mayo's updated MedEd Manager platform and provided the basis for Mayo's desired feature set. In short, based on these materials, it is my opinion that, at a minimum, K2P's features and functionality were used to instruct the development of MedEd Manager.

IV. The Mayo CV Platform and K2P share functionally equivalent features.

31. In addition to evaluating the general timeline of Mayo's communications about the K2P platform, I was provided access to both Mayo's MedEd Manager platform and K2P's platform. (*See supra*. ¶ 14.) This allowed me to evaluate each platform as they are presented to a user and observe the similarities and differences between them.² While this exercise did not provide visibility into the "behind-the-scenes" processes and functions of the platforms, it was a sufficient basis to observe the features and functionality of the platforms at the surface level.

² Access to each platform provided the ability to access numerous courses. I note that I specifically compared K2P's course entitled "Mayo Clinic Interventional Cardiology Online Board Review" to the Mayo CV course entitled "2020 Interventional Cardiology Online Board Review."

32. I note that, as a matter of design, K2P's platform and MedEd Manager are visually different. The two (2) platforms, however, provide a similar user experience because of the shared features and functions.

33. As discussed above, Mayo desired specific functionality for MedEd Manager, including:

- a. Content recommendations: this feature, in general terms, evaluates a user's performance on an assessment. Essentially, it works by identifying areas for improvement, and serves users with a personalized learning recommendation for follow-up study.
- b. Pre-assessment and post-assessment: these assessments are separately scored, and as such are used in both the K2P and Mayo platforms as a basis to provide metrics about testing improvement.
- c. In-course note taking: a "sub-application" that allows users, within the interface, to generate and maintain written notes. This feature gives students the choice to take notes within the application, thus obviating the need to take notes on paper, or in a separate application like Microsoft Word.
- d. Organization of courses in "Learning Libraries": This is the overall organization of the course content and materials, including slides and presentations with learning objectives, teaching points, and testing points.
- e. Option to present for video and audio presentations.
- f. Ability to maintain certification credits for medical certification.

g. Course Evaluations: there is a coded functionality for users to submit reviews of the course and instructors.

34. These features and functionalities are included in K2P's platform, and are also features and functionalities of MedEd Manager. (See Figs. 1-3).

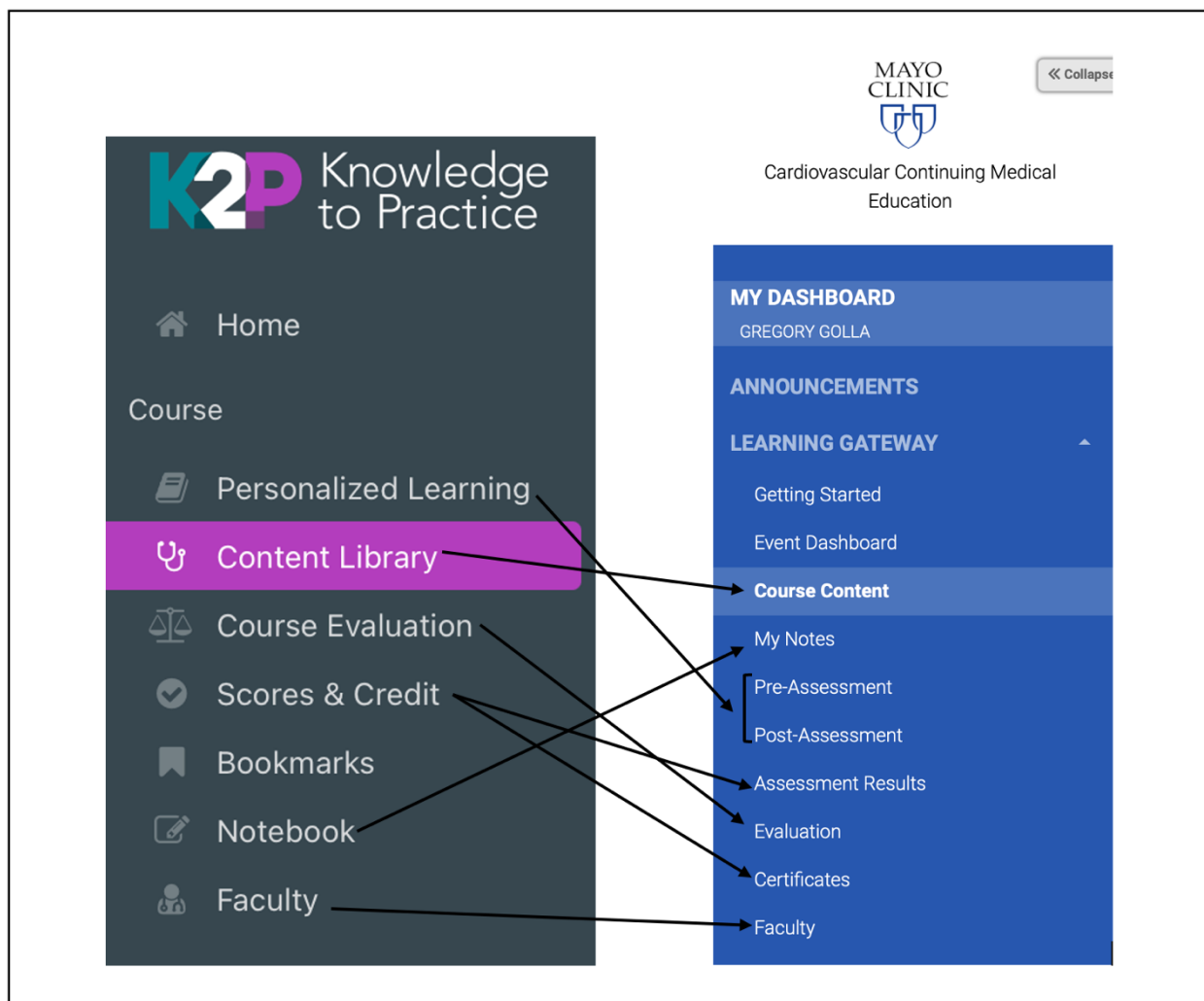


Figure 1: Organization of functions

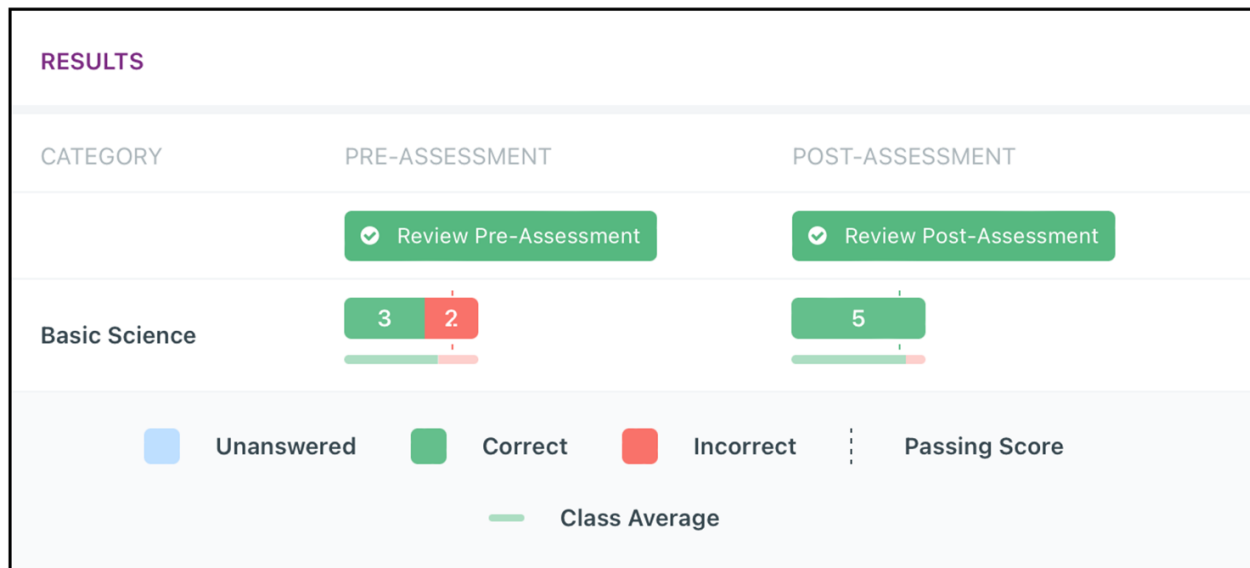


Figure 2: K2P Pre/Post-Assessment Scoring and Comparison

Results by Topic			
	Pre Test	Post Test	Lift
The Basics	80.0%	80.0%	0.0%
Medical Statistics: Pearls for the Boards	100.0%	100.0%	0.0%
Drugs You Need to Know I	100.0%	50.0%	-50.0%
Radiation Physics, Imaging, Risks, and Safety	100.0%	100.0%	0.0%
Drugs You Need to Know II	0.0%	100.0%	100.0%

Figure 3: Mayo CV Course Pre/Post-Assessment Scoring and Comparison

Conclusion

35. Because 1) Mayo communicated the functionality of K2P when developing MedEd Manager with its web development partner, and 2) there are significant functional similarities between MedEd Manager and K2P's platform, I conclude that without access to K2P's platform, Mayo and CWS would not have had a clear scope of what features and functionality to include in the MedEd Manager

product. In other words, the functionality and features of MedEd Manager were not conceptualized nor designed from scratch.

36. I respectfully reserve the right to supplement or amend this report if additional materials are provided to me, or additional information is requested.

Executed on: December 14, 2022 in Hennepin County, Minnesota.

A handwritten signature in black ink, appearing to read "Mark Lanterman", with a stylized flourish at the end.

Mark Lanterman

Exhibit A



Mark Lanterman

Chief Technology Officer

Office
800 Hennepin Avenue
5th Floor
Minneapolis, MN 55403

Phone
(952) 924-9220

Fax
(952)924-9921

Email
mlanterman@compforensics.com

Web
www.compforensics.com

Professional Biography

Mark has over 30 years of experience in digital forensics, e-discovery, and has provided education and training to a variety of audiences. Prior to founding Computer Forensic Services in 1998, Mark was a sworn investigator with the United States Secret Service Electronic Crimes Task Force. Both federal and state court judges have appointed Mark as a neutral computer forensic analyst.

Mark is a member of the Minnesota Lawyers Professional Responsibility Board and serves on its Rules & Opinion Committee.

Mark frequently provides training within the legal community, including presentations for the United States Supreme Court, Georgetown Law School, the 11th Circuit Federal Judicial Conference, the 8th Circuit Federal Judicial Conference, the American Bar Association, the Federal Bar Association, and the Department of Homeland Security, among others.

As a member of its faculty, Mark has presented to the entire Federal Judiciary through the Federal Judicial Center. Mark is faculty at the National Judicial College, and is an adjunct instructor in the University of Minnesota's MSci Security Technologies program. Mark is also a professor of cybersecurity at the Saint Thomas School of Law.

Mark provides frequent commentary about cyber security issues for national print and broadcast media, including ABC, Bloomberg, BusinessWeek, CBS, Fox News, NBC, *The New York Times*, NPR, and the *Wall Street Journal*.

Education and Certifications

Upsala College – B.S. Computer Science; M.S. Computer Science

Harvard University – Cybersecurity

Department of Homeland Security – Federal Law Enforcement Training Center
Seized Computer Evidence Recovery Specialist

National White-Collar Crime Center – Advanced Computer Forensics

Publications

Co-author of the *E-Discovery and Forensic Desk Book*

Regular columnist for *Bench & Bar* magazine



Previous Testimony List – Mark Lanterman

- *Tumey LLP, et al. v. Mycroft, Inc., et al.*, 4:21-CV-00113 (W.D. Mo.)
- *Warren, et al. v. ACOVA, Inc., et al.*, 27-CV-18-3944, (Henn. Co. Minn.)
- *Hagen v. Your Home Improvement, LLC, et al.*, 73-cv-21-2067, (Sterns Co. Minn.)
- *Jane Doe, et al. v. Independent School District 31*, 20-CV-00226, (U.S. Dist. Ct. Minn.)
- *Galan v. Munoz, et al.*, 2019-CI-19143, (Dist Ct. Bexar Co., Texas)
- *Vision Industries Group, Inc. v. ACU Plasmold, Inc., et al.*, 2:18-CV-6296, (U.S. Dist. Ct. New Jersey)
- *Troutman v. Great American Hospitality, LLC*, 19-CV-878, Stanley Co., N. Carolina)
- *Baxter Insurance Group of Agents, et al. v. Woitalla et al.*, 27-CV-20-16685, (Henn. Co. Minn.)
- *Sweigart v. Patten, et al.*, 5:21-cv-00922, (U.S. Dist Ct. E.D. Penn.)
- *Sarah Hoops v. Solution Design Group, Inc.*, 27-CV-20-11207, (Henn. Co. Minn.)
- *Stephanie Ramos v. Lazy J Transport, et al.*, 2018CI21594, (Dist Ct. Bexar Co., Texas)
- *Schwan's Company, et al. v. Rongxuan Cai, et al.*, 0:20-SC-2157, (U.S. Dist. Ct. Minn.)
- *Michael D. Tewksbury, as Guardian ad Litem for Miles Chacha and Lulu Kerubo Simba v. PODS Enterprises, LLC, et al.*, 62-CV-20-4209, (Ramsey Co., Minn.)
- *RG Golf v. The Golf Warehouse*, 19-CV-00585 (U.S. Dist. Ct. Minn.)
- *Dunn v. PSD LLC, et al.*, 02-CV-20-4504, (Anoka Co., Minn.)
- *Chambers, et al. v. B&T Express, et al.*, 19-CI-00790, (Franklin Cir. Ct. Ky. 2d Div.)
- *Natco Pharma Ltd. V. John Doe*, 21-cv-00396-ECT-BRT, (U.S. Dist. Ct. Minn.)
- *Kimberly Clark, et al. v. Extrusion Group, et al.*, 1:18-cv-04754-SDG, (U.S. Dist. Ct. N.D. Ga.)
- *PalatiumCare Inc. v. Notify, LLC, et al.*, 2021-cv-000120, (Sheboygan Co., Wis.)

- *State of Nebraska v. Jeffrey Nelson*, CR21-19, (Saunders Co., Nebraska)
- *Lutzke v. Met Council*, 27-CV-19-14453, (Henn. Co. Minn.)
- *Rivera et al., v. Hydrolite, et al.*, DC-19-143, (Dist. Ct. Duval Co, Texas).
- *Coleman & Hartman, et al. v. iAMg, et al.*, 16CV317, (Cir. Ct. Polk Co Wis.)
- *Mixon v. UPS, et al.*, 2019-CI-13752, (Dist Ct. Bexar Co., Texas)
- *Goodman v. Goodman*, 27-DA-FA-21-672, (Henn. Co. Minn.)
- *Shaka v. Solar Partnership*, 27-CV-20-12474, (Henn. Co. Minn.)
- *Patel Engineering Ltd. V. The Republic of Mozambique*, UNCITRAL PCA: 2020-21.
- *Estate of Rima Abbas v. ABDCO*, (19-CI-1315), (Fayerette Cir. Ct. Ky. 4th Div.)
- *State of Nebraska v. Jeffrey Nelson*, CR21-19, (Saunders Co., Nebraska)
- *Riccy Mabel Enriquez-Perdomo v. Richard A. Newman, et al.*, 3:18-CV-549, (U.S. W.D. Kentucky)
- *United States v. Alakom-Zed Crayne Pobre*, PX-19-348, (U.S. Dist. Maryland)
- *Lewis v. Northfield Savings Bank, et al.*, 295-5-19-WNCV, (Vermont, Sup. Ct., Washington Div.)
- *State of Minnesota v. Thomas James Crowson*, 13-CR-20-325, (Chisago Co., Minn.)
- *Vimala et al., v. Wells Fargo, et al.*, 3:19-CV-0513, (U.S. M.D. Tenn.)
- In re: Estate of Anthony Mesiti, 318-2017-ET-00340, N.H. 6th Cir. Probate Division.
- *Ernie's Empire, LLC, et al. v. Burrito & Burger, Inc., et al.*, 82-CV-20-28, (Wash. Co., Minn.)
- *Sol Brandys v. Wildamere Capital Management LLC*, Case No.: 27-CV-18-10822, (Henn. Co., Minn.)
- *State of Minnesota v. Yildirim*, Case No. 27-CR-19-7125, (Henn. Co., Minn.)
- *Jabil v. Essentium, et al.*, Case No. 8:19-cv-1567-T-23SPF, (U.S. M.D. Fla.)
- *Lifetouch National School Studios Inc. v. Walsworth Publishing Company, et al.*, (U.S. Dist. Conn.)
- *Motion Tech Automation, LLC v. Frank Pinex*, Case No.: 82-CV-18-5202, (Wash. Co., Minn.)
- *Lundin v. Castillo, et al.*, Case No.: 2019-CV-000452, (Walworth Co., Wis.)
- *Yun v. Szarejko-Gnoinska, et al.*, Case No.: 27-PA-FA-13-967, (Henn. Co., Minn.)

- Jonas Hans v. Belen Fleming, Case No.: 27-PA-FA-13-967, (Henn. Co., Minn.)
- Daniel Hall, et al. v. Harry Sargeant III, Case No.: 18-cv-80748, (U.S. Dist. Ct. S.D. Fl.)
- Miller v. Holbert, et al., Case No.: 48-CV-15-2178, (Mille Lacs Co., Minn.)
- Strohn, et al. v. Northern States Power Company, et al., Case No.: 18-cv-1826-DSD-KMM, (U.S. Dist. Ct. Minn.)
- Stamper, et al. v. Highlands Regional Medical Center, Case Nos.: 11-CI-1134 & 12-CI-00468, (Commonwealth of Kentucky, Floyd Cir. Co., Div. I).
- Patterson Dental Supply, Inc. v. Daniele Pace, Case No.: 19-cv-01940-JNE-LIB, (U.S. Dist. Ct. Minn.)
- Ryan Rock v. Jonathan Sargent and The Sargent Group, Inc. d/b/a Todd & Sargent, Inc., Case No. LACV050708, Dist. Ct. Story Co., Iowa.
- Oscar Alpizar v. Eazy Trans, LLC, et al., Case No.: 2018CI00878, (Dist Ct. Bexar Co., Texas)
- MatrixCare v. Netsmart, Case No.: 19-cv-1684, (D. Minn.)
- State of Minnesota v. Nathan Roth, Case No.: 80-CR-18-1007, (Wadena Co., Minn.)
- Parisi v. Wright, Case No.: 27-CV-18-5381, (Henn. Co., Minn.).
- Lloyd C. Peeoples, III v. Carolina Container, LLC, U.S. N. Dist. Geor., Case No.: 4:19-cv-00021
- Sandra Wolford, et al. v. Bayer Corp., et al., Action No. 16-CI-907, 17-CI-2299, Commonwealth of Kentucky, Pike Cir. Ct. Div. I. (2019)
- BuildingReports.com, Inc. v. Honeywell International, Inc., Case No.: 1:17-cv-03140-SCJ, (U.S. Dist. Ct. N.D. Ga.)
- Evan D. Robert and Dr. Kerry B. Ace v. Lake Street Cafeteria, LLC, et al., Case No: 27-CV-17-18040, (Henn. Co., Minn.)
- State of Minnesota v. Andrew Seeley, Case No.: 14-CR-17-4658, (Clay Co., Minn)
- McNutt & Company v. Focus Engineering, et al., Case No.: CV-2018-900432.00, Cir. Ct. Lee County, Alabama.
- In re: City of Eden Prairie and Law Enforcement Labor Services Inc., BMS Case #19-PA-0530 (2019).
- State of Minnesota v. Stephen Allwine, Case No.: 82-CR-17-242, (Wash. Co., Minn.)
- PMT v. Wade Fredrickson, Case No.: 27-CV-18-4364, (Henn. Co., Minn.)
- Stratasys, Inc. v. Christopher Krampitz, Case No.: 0:17-cv-05524-DSD-HB, (D. Minn.)

- State of North Dakota v. Connor Brennan, (Court File No.: 17300214), (Grand Forks Co., ND)
- U.S. v. Farber, Case No.: 1:2017-cr-00188-320735, (E.D. Cal.)
- In re: the Marriage of: Amanda Jo Briggs and Kent Stewart Mitchell Briggs, Case No.: 27-FA-17-3414, (Henn. Co., Minn.)
- Edgewell Personal Care Company v. Michael O'Malley, (Superior Court (Judicial District of Ansonia at Milford) No. AAN-CV-176025160-S)
- East Coast Test Prep, L.L.C. d/b/a Achieve Test Prep and Mark Olynyk, v. Allnurses.com, Inc., and David R. Smits, as Administrator of the Estate of Brian Short, ABC Companies 1-10 and John Does 1-10, Case No.: 0:15-cv-03705-JRT-SER (D. Minn.)
- DTN, LLC, v. Matthew Walsh, Case No. 0:17-cv-5206(SRN)(HB) (D. Minn.)
- In Re the Matter of: Wainaina Kamau and Ruth Marionya Kamau, Court File No: 27-DA-FA-18-5521 (Dist. Ct. Hennepin County, Minn.).
- Nagios Enterprises, LLC, vs. Mary Starr, et al. Court File No: 62-CV-16-3280, (Dist. Ct. Ramsey County, Minn.)
- Larry Novack v. David Rios and United Parcel Service, Inc. (TX Dist. CT., 57th Dist. (Bexar County, Texas) No. 2016-CI-12388)
- Mylan Pharmaceuticals Inc., Petitioner v. Sanofi-Aventis Deutschland GMBH Patent Owner (United States Patent and Trademark Office) U.S. Patent Nos. 7,476,652 and 7,713,930-IPR2017-01526/IPR2017-01528)
- Elisabeth Ostendorf v. Michigan State University and the Board of Trustees of Michigan State University, (State of Michigan (In the court of claims) No. 15-47-MZ)
- Elyse Puklich v. Blayne Puklich, (Burleigh Co., ND) No. 08-2014-CV-00029)
- Jeffrey Ketchum and Anniken Ketchum vs. Home-Owners Insurance; D & L Janitorial Supply, Inc. (MI 47th Circuit Court (Delta Co.) No. 15-22960-CB)
- Parsons Electric L.L.C vs. Integrated Building Solutions L.L.C., Paul Kelly, Kristopher Kelly, Troy Stanislawski, and Jack Tucker (MN Dist. CT., 10th Dist. (Anoka Co.) No. 02-CV-16-2644)
- State of Minnesota vs. Erin Marie Hennessey, (MN Dist. CT., 10th Dist. (Washington Co.) No. 82-CR-16-2208)
- The Hays Corporation vs. Barry Peters, et al. (In The Circuit for Montgomery Co., Maryland)
- International Chemtex Corporation vs. Jennifer Lassiter, John Hofstad, and Sustainable Water Treatment, LLC (United States Dist. Court (Dist. of MN))

- David Rubenzer and La La La, LLC vs. City of Burnsville (MN Dist. Ct., 1st Dist. (Dakota Co.) No. 19HA-CV-15-3743)
- State of Minnesota vs. John Frederick Thorene, IV (MN Dist. Ct., 6th Dist. St. Louis Co.) No. 69DU-CR-15-3038)
- Nu-Look Exteriors, Inc. vs. Brett A. Looney, Mark A. Peare, Julie A. Young, f/k/a Julie A. Strot, Stephen B. Martin, and 4 Corner Architectural Sheet Metal, Inc. (MN Dist. Ct., 1st Dist. (Dakota Co.) No. 19HA-CV-15-432)
- Brook Mallak v. Aitkin County, et al., (United States District Court of Minnesota, No. 13-CV-02119 DWF/LIB)
- Jonathan Scarborough v. Federated Mutual Insurance Company, (United States District Court (Dist. of MN) No: 0:15-cv-01633 -DWF/FLN)
- Future Motion, Inc. vs. Changzhou First International Trade Co., LTD, (United States District Court (Dist. of NV) No. 2:16-cv-00013-MMD-CWH)
- In re the Marriage of: Catherine Ann Ivey and John Raymond Ivey, (State of Minnesota (Hennepin Co.) No. 27-FA-15-7650)
- Bay Side Recycling Co., et al. v. SKB Environmental, Inc., Case No.: 14-CV-4550 (SRN/LIB), (U.S. Dist. Ct. Minn.).
- United States of America v. Khaalid Adam Abdulkadir, (United States District Court (Dist. of MN) No: 15-mj984 KES)
- Kimberly Kay Seidel and Trevor Carlton Seidel, (MN Dist. Ct., 10th Dist. (Anoka Co.) No. 02-FA-15-2022)
- Dexon Computer, Inc. v. Modern Enterprise Solutions, Inc., Timothy Durant, and Andrew Uzpen, (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-15-17171)
- Golden Supply, Inc., a Minnesota Corporation v. Jeffrey Hunt and Ken Aronckes, (MN Dist. Ct. 4th Dist. (Hennepin Co.) No. 27-CV-15-1625)
- Jerry Wilkinson and Karen Wilkinson v. State Farm Fire and Casualty Company, (U.S. Dist. Ct. E.D. Wis.) Case No. 14 CV 1187)
- Greiner Construction, Inc. vs. Bert Westerman et al., (MN Dist. Ct., 4th Dist. (Hennepin Co.)
- Samantha Orduno, et. al. v. Richard Pietrzak, et al. (United States District Court (Dist. of MN) No. 0:14-cv-01393-ADM-JSM)
- Zimmer, Inc. v. Stryker Corporation; Howmedica Osteonics Corp. d/b/a Stryker Orthopedics; and Cody Stovall. (United States District Court (Northern District of Indiana of Indiana South Bend Division) Case No. 3:14-cv-00152-JD-Can)
- Robert Half International Inc., v. Donna Farrugia, et al. (Superior court of State of California (San Francisco Co.) No. CGC-14-539338)

- Emergent Systems Exchange, LLC, vs. Daniel Ray McGinnis, et al., (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-147338)
- Tristan Connor Damron v. John E. Norris, et. al., (Ala. Circuit Court (Elmore Co.) No. CV11-900259.00)
- Curtis Trude, et al. v. Glenwood State Bank, et al. (MN Dist. Ct., 8th Dist. (Meeker Co.) No. 47-CV-12-176)
- Pioneer Home, Inc. v. American Federal Bank, (MN Dist. Ct., 7th Dist. (Hennepin Co.) No. 56-CV-13-3353)
- Prosthetic Laboratories of Rochester, Inc., v. Brandon Sampson, et al., (MN Dist. Ct. 3rd Dist. (Hennepin Co.) No. 55-CV-133625)
- Jenine Ellison v. Advanced Surgery Center of Palm Beach Count, LLC, (15th Circuit Court (Palm Beach County), Florida. No: 502011CA020861XXXXMB.)
- JIT Companies, Inc. v. Erik Edwin Swanson, (MN Dist. Ct., 3rd Dist. (Hennepin Co.) No. 66-CV-132532)



Publications List – Mark Lanterman

Bench & Bar of Minnesota

How the American Choice and Innovation Online Act may affect cybersecurity,
July 2022

Smishing attacks and the human element, May/June 2022

Still on the defensive, More on the Missouri website vulnerability investigation,
April 2022

What we can already learn from the Cyber Safety Review Board, March 2022

The Log4j vulnerability is rocking the cybersecurity world. Here's why.,
January/February 2022

On the defensive: Responding to security suggestions, December 2021

Go fish? Proportionality revisited, November 2021

Mailbag: Cybersecurity Q+A, October 2021

The NSA advisory on brute force attacks, September 2021

Security is a team game, August 2021

Improving national cybersecurity, July 2021

Apple's new iOS strikes a blow for data privacy, May/June 2021

Geofence warrants, The battle is just beginning, April 2021

Ransomware and federal sanctions, March 2021

The SolarWinds breach and third-party vendor security, February 2021

Considerations in cloud security, January 2021

Deciding when to use technology-assisted review, December 2020

How to avoid an old scam with a new twist, November 2020

Your back-to-school tech brush-up, October 2020

The Twitter breach and the dangers of social engineering, September 2020

Cyber risk: Is your data retention policy helping or hurting?, August 2020

Cyber riots and hacktivism, July 2020

Working from home and protecting client data, May/June 2020

Cybersecurity in pandemic times, April 2020

Business continuity and coronavirus planning, March 2020

Doxxing made easy: social media, March 2020

Taking responsibility for your cybersecurity, February 2020

Beyond compliance: Effective security training, January 2020

Doxxing redux: The trouble with opting out, December 2019

Proportionality and digital evidence, November 2019

AI and its impact on law firm cybersecurity, October 2019

Too secure? Encryption and law enforcement, September 2019

Security, convenience and medical devices, August 2019

Physical security should be part of your incident response plan, July 2019

"Papers and effects" in a digital age, pt II, May/June 2019

Security considerations for law firm data governance, April 2019

Third-party vendors and risk management, March 2019

The Marriott breach: four years?, February 2019

"Papers and effects" in a digital age, co-authored with Judge (Ret.) Rosenbaum,
January 2019 (Republished in *The Computer & Internet Lawyer*)

The Chinese spy chip scandal and supply chain security, December 2018
(Republished in *The Computer & Internet Lawyer*)

Don't forget the inside threat, November 2018

Cyberattacks and the costs of reputational harm, October 2018

Fair elections and cybersecurity, September 2018

E-discovery vs. forensics: Analyzing digital evidence, August 2018

Social media and managing reputational risk, July 2018

Managing Cyber Risk: Is cyber liability insurance important for law firms?,
May/June 2018 (Republished in *The Computer & Internet Lawyer*)

Social engineering: How cybercriminals capitalize on urgency, April 2018

Stephen Allwine: When crime tries to cover its digital tracks, March 2018

Is the Internet of Things spying on you?, February 2018

#UberFail, January 2018

Ransomware: To pay or not to pay?, December 2017

How digital evidence supported gerrymandering claims, November 2017

Facial recognition technology brings security & privacy concerns, October 2017

Putting communication and clients first in digital forensic analysis, September 2017

Digital evidence: New authentication standards coming, August 2017

Your Personal Data – Or is it? Doxxing and online information resellers pose threats to the legal community, May/June 2017

What You Don't Know Can Hurt You: Computer Security for Lawyers, March 2014

Minnesota Lawyer

Phishing, vishing and smishing – oh, my!, January 2018

Equifax was unprepared for a data breach, September 2017

Cybersecurity and forensic application in cars, July 2017

Preventing 'spear-phishing' cyber attacks, May 2017

Opting out when private information goes public, March 2017

Are fingerprints keys or combinations?, February 2017

Digital Forensics and its role in data protection, February 2017

Acknowledge the security issues, December 2016

Modern life is driven by the internet of things, November 2016

Are medical devices vulnerable to hackers?, October 2016

Digital evidence as today's DNA, September 2016

Colorado Lawyer

Is Emailing Confidential Information a Safe Practice for Attorneys?, July 2018
(Republished in The Journals & Law Reviews database on WESTLAW)

International Risk Management Institute, Inc. (IRMI)

Evolving Threats? Assess and Update Security Measures, June 2022

Cyber Security and the Russian Invasion of Ukraine, April 2022

Thoughts on the FBI Email Compromise—and Lessons Learned, January 2022

Ransomware, National Cyber Security, and the Private Sector, October 2021

Standardization Matters in Establishing a Strong Security Posture, June 2021

Third-Party Vendor Risk Management, March 2021

The Importance of (Remote) Security Culture in Mitigating Risks, December 2020

Security from Home: Continuing to Work and Learn Amid COVID-19, September 2020

Operational Risk Revisited in the Wake of COVID-19, June 2020

Cyber Threats and Accounting for Operational Risk, March 2020

Human Aspect of Incident Response Investigations, January 2020

The Impact of Digital Incompetency on Cyber-Security Initiatives, September 2019

Communication in Responding to Cyber Attacks and Data Breaches, June 2019

Cyber Security and Resilience, January 2019

Leadership in Developing Cultures of Security, September 2018

Real-Life Consequences in a Digital World: The Role of Social Media, July 2018

Some Thoughts on the Dark Web—and How it Affects You, March 2018

Personal Information and Social Media: What Not to Post, September 2017

Managing Doxxing-Related Cyber Threats, July 2017

Understand the Layers of Cyber-Security and What Data Needs Protecting,
March 2017

Learn about the Internet of Things: Connectivity, Data, and Privacy, January 2017

Assessing Risk and Cyber-Security, September 2016

SCCE The Compliance & Ethics Blog

The Components of Strong Cybersecurity Plans: Parts 1-5, 2017

Prevention Is the Best Medicine, August 2016

Lawyerist

Detection: The Middle Layer of Cybersecurity, April 2017

Don't Be Too Hasty! What to Do When an Email Prompts You to Act Quickly,
February 2017

How to Avoid Spoofing, Spear Phishing, and Social Engineering Attacks, October
2016

Law Practice

The Dark Web, Cybersecurity and the Legal Community, July/August 2020

Captive International

COVID-19 and the importance of the cyber captive, April 2020

Attorney at Law Magazine

The Digital Challenges of COVID-19, June 2020

E-Discovery Deskbook

Chapter Thirteen “Forensic Experts—When and How to Leverage the Talent” co-authored with John M. Degan Briggs and Morgan, P.A.

The Complete Compliance and Ethics Manual 2022

Cybervigilance in Establishing Security Cultures

Exhibit B – Materials Considered

- Complaint
- Answer and Counterclaims
- CWS_00000015
- CWS_00000017-18
- K2P0003605
- K2P0130972
- K2P0165614
- K2P0287210
- K2P0286879
- K2P0435818
- MAYO_00063795
- MAYO_00065873
- MAYO_00067300
- MAYO_00068669
- MAYO_00070923
- 2022 04 19 DI 097 Declaration of Kara Sasse (Sealed)
- 2022 04 19 DI 116 Declaration of B. Price Kerfoot
- 2022 04 19 DI 116-1 Exhibit A-B to Price Kerfoot Declaration
- 2022 03 29 DI 095 Declaration of Mary Ellen Beliveau (Sealed)
- Deposition Transcript of CWS 30(b)(6) Justin McGinnis dated 09/28/22 with Defendants' Deposition Ex. Nos. 14-17; 19; 21; 24-26; 31; 33; 36
- Deposition Transcript of Teresa Atkinson dated 09/30/22 with Defendants' Deposition Ex. Nos. 37-43; 46; 62
- Deposition Transcript of Lynnea Babcock dated 11/04/22 with Defendants' Deposition Ex. Nos. 99; 10; 108
- Deposition Transcripts of Julie McAdams dated 10/26/22 and 12/16/22 with Defendants' Deposition Ex. Nos. 90; 92; 177-178
- Deposition Transcript of Dr. Rick Nishimura dated 11/16/22 with Defendants' Deposition Ex. Nos. 168;172-174; 176

CERTIFICATE OF SERVICE

I hereby certified that on December 14, 2022, I caused a true and correct copy of

Expert Report of Mark Lanterman

to be served on below counsel via email:

Andrew Brantingham
brantingham.andrew@dorsey.com
Alan J. Iverson
iverson.alan@dorsey.com
Donna Reuter
reuter.donna@dorsey.com
Nathan Ebnet
ebnet.nathan@dorsey.com

Dated: December 14, 2022

s/ Ariel O. Howe
Ariel O. Howe